

Applicant : Henricksen et al.
 Serial No. : 09/688,525
 Filed : October 16, 2000
 Page : 9 of 26

REMARKS

The Description has been amended to lend antecedent support for terminology in the claims. Claims 1, 19 and 20 have been cancelled, claim 2 has been rewritten in independent form, and claims 3-10 and 12-18 have been amended. Claim 11 has been resubmitted without amendment. New claims 21-22 have been added to particularly point out and distinctly claim subject matter regarded as the invention. Such cancellations of and amendments to claims are only for the purpose of advancing the prosecution of this application and are not to be construed as an abandonment of any of the novel concepts disclosed therein.

1,2 Claim 11 stands rejected under 35 U.S.C. §102(b) as being anticipated by Selby. The reference is said to disclose a loud speaker system comprising a first portable array module comprising a portable enclosure and at least six acoustic drivers positioned in the enclosure in a substantially straight line, with specific reference to Fig. 1, a second portable array comprising a second portable enclosure, and a plurality of acoustic drivers positioned in a substantially straight line, the reference being said to disclose a separate stack module, i.i., second array, with specific reference to column 3, line 61-62, and an attachment system for attaching the first portable array to the second portable array in a manner so as to extend the substantially straight line. The reference is said to disclose stacking (i.e., attaching) separate modules varying of the height of the speaker, with specific reference to column 3, lines 57-62.

This ground of rejection is respectfully traversed.

"It is well settled that anticipation under 35 U.S.C. 102 requires the presence in a single reference of all of the elements of a claimed invention." *Ex parte Chopra*, 229 U.S.P.Q. 230, 231 (BPA&I 1985) and cases cited.

"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

"This court has repeatedly stated that the defense of lack of novelty (i.e., 'anticipation') can only be established by a single prior art reference which discloses each and every element of

the claimed invention.” *Structural Rubber Prod. Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1270 (Fed. Cir. 1984), citing five prior Federal Circuit decisions since 1983 including *Connell*.

In a later analogous case the Court of Appeals for the Federal Circuit again applied this rule in reversing a denial of a motion for judgment n.o.v. after a jury finding that claims were anticipated. *Jamesbury Corp. v. Litton Industrial Prod., Inc.*, 225 U.S.P.Q. 253 (Fed. Cir. 1985).

After quoting from *Connell*, “Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim,” 225 U.S.P.Q. at 256, the court observed that the patentee accomplished a constant tight contact in a ball valve by a lip on the seal or ring which interferes with the placement of the ball. The lip protruded into the area where the ball will be placed and was thus deflected after the ball was assembled into the valve. Because of this constant pressure, the patented valve was described as providing a particularly good seal when regulating a low pressure stream. The court quoted with approval from a 1967 Court of Claims decision adopting the opinion of then Commissioner and later Judge Donald E. Lane:

[T]he term “engaging the ball” recited in claims 7 and 8 means that the lip contacts the ball with sufficient force to provide a fluid tight seal. *** The Saunders flange or lip only sealingly engages the ball 1 on the upstream side when the fluid pressure forces the lip against the ball and never sealingly engages the ball on the downstream side because there is no fluid pressure there to force the lip against the ball. The Saunders sealing ring provides a compression type of seal which depends upon the ball pressing into the material of the ring. *** The seal of Saunders depends primarily on the contact between the ball and the body of the sealing ring, and the flange or lip sealingly contacts the ball on the upstream side when the fluid pressure increases. 225 U.S.P.Q. at 258.

Relying on *Jamesbury*, the ITC said, “Anticipation requires looking at a reference, and comparing the disclosure of the reference with the claims of the patent in suit. A claimed device is anticipated if a single prior art reference discloses all the elements of the claimed invention as arranged in the claim.” *In re Certain Floppy Disk Drives and Components Thereof*, 227 U.S.P.Q. 982, 985 (U.S. ITC 1985).

Claim 11 expressly calls for the attachment system for attaching the first portable array to the second portable array in a manner so as to extend said substantially straight line. This claimed feature is fully described in the paragraph spanning pages 10 and 11 describing how the modules are connected together end-to-end to create a line array loudspeaker at least two modules in length. The reference discloses in Fig. 1 side-by-side modules so that the length of the assembly is that of a single module, not at least two as required by the invention disclosed and claimed in this application. The reference in column 3, lines 60-62 is to stacking the side-by-side arrays. There is no disclosure in the reference of a first portable array module and a second portable array module. An assembly having six woofer or mid-range drivers 34 in column 12 beside a column of six tweeters in column 14 fastened to base portion 16 is hardly portable, and the reference makes no claim that the disclosed structure is portable. Column 3, lines 57-62, reads, "The first and second column mounts extend to a vertical height of about 6 feet from the base portion 16 in the preferred embodiment, that the height could range from about 5 1/2 feet to a ceiling height of about 12 feet comprising several separate stacked modules for commercial applications."

There is no disclosure of an attachment system for attaching a nonexistent first portable array to a nonexistent second portable array. Stacking modules is not a disclosure of attaching a first portable array to a second portable array.

Accordingly, withdrawal of the rejection of claim 11 as anticipated by the reference is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the reference he regards as corresponding to each element in claim 11.

4,5. Claim 9 stood rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as a primary reference and Russell as a secondary reference. Claim 9 has been amended to depend on claim 2. The primary reference is said to disclose a loudspeaker system comprising a first loudspeaker array comprising an enclosure having a width and a height and at least six acoustic drivers having radiating surfaces, with specific reference to Fig. 2, column 5, lines 3537,

wherein drivers are said to be positioned in the enclosure in a first substantially straight line, substantially regularly spaced so that the edges of radiating surfaces are less than two inches apart, with specific reference to column 5, lines 37-39, and the array is said to be constructed and arranged to radiate sound in a predetermined frequency range, with specific reference to column 2, lines 10-13. The primary reference does not disclose the drivers having a diameter less than three inches. The secondary reference is said to disclose a speaker system with an array of drivers. The secondary reference is said to disclose prior art including a columnar speaker assembly including six 1 1/2 inch dome drivers, with specific reference to column 2, lines 4-7. Both the primary and secondary references are said to disclose columnar speaker systems for radiating sound over a desired area. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to use a speaker with a diameter less than three inches since it is said to be known in the art that a speaker less than three inches is also capable of radiating sound over a desired area.

The primary reference is said to further disclose the diameter; that is, the width, of the speaker enclosure, being six inches, with specific reference to column 4, lines 6-7, and it is said the speakers can be disposed within a height eight feet, with specific reference to column 4, lines 15-18, producing a height to width ratio of 8 feet, 12 inches/6 inches = 16 which is said to be greater than 11.

This ground of rejection is respectfully traversed.

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

"Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art

Applicant : Henricksen et al.
Serial No. : 09/688,525
Filed : October 16, 2000
Page : 13 of 26

suggested the desirability of the modification." *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original, footnotes omitted).

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. [citing *Lindemann* with emphasis added.]" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

As the Federal Circuit Court of Appeals said in *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999):

Close adherence to this methodology is especially important of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.'

And in *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000), the Court said:

[I]dentification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. *See id.* [*Dembiczak*]. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *See In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998), *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that

Applicant : Henricksen et al.
Serial No. : 09/688,525
Filed : October 16, 2000
Page : 14 of 26

reference. *See B. F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 U.S.P.Q.2d 1314, 1318 (Fed. Cir. 1996).

The primary reference does not disclose both drivers having a diameter of less than three inches. There is no disclosure in the secondary reference of the at least six drivers substantially regularly spaced so that the edges of the radiating surfaces are less than two inches apart. Nor do the references suggest the desirability of combining what is there disclosed to meet the terms of claim 9.

Claim 9 is dependent upon and includes all the limitations of claim 2, and the reasoning below in support of the patentability of claim 2 is submitted to support the patentability of claim 9. Furthermore, the sentence in column 4, lines 15-18 of the reference, at most discloses a height of the enclosure between 8 foot and 3 feet, which is an effective height of 5 feet, and even arguendo accepting that the column of the secondary reference is six inches in diameter, the effective ratio would be only 10, which is less than the claimed 11.

Nor do these references disclose a line loudspeaker system radiating over at least six octaves.

Accordingly, withdrawal of the rejection of claim 9 as unpatentable over the primary and secondary references, is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as corresponding to each element in claim 9 and quote verbatim the language regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

6. Claim 8 as originally presented stood rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as a primary reference said to be modified as applied to claim 1 above, and further in view of Pawlowski as a supplementary reference. As said to be stated above apropos of claim 1, the primary reference as said to be modified is said to make obvious all elements of that claim. The primary reference as said to be modified is said to not disclose an electrical circuit which provides essentially the same audio signal to all of the acoustical drivers

Applicant : Henricksen et al.
 Serial No. : 09/688,525
 Filed : October 16, 2000
 Page : 15 of 26

at all frequencies. The supplementary reference is said to disclose a loudspeaker system where each acoustical driver is provided with the same audio signal, with specific reference to Fig. 3. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to use circuitry that provides all drivers with the same audio signal in order to provide the same signal to all drivers of a speaker array for a uniform output.

This ground of rejection is respectfully traversed. It is not understood what is meant by "Ferren as modified as applied to claim 1 above," because that modification involved reference to Russell as a secondary reference which is not identified in rejecting claim 8. If this rejection was intended to embrace the rejection of claim 1 on the primary and secondary references, then Pawlowski is a tertiary reference.

Claim 8 is dependent upon and includes all the limitations of claim 2, and the reasoning set forth below in support of the patentability of claim 2 is submitted to support the patentability of claim 8 so that further discussion of the supplementary reference is submitted to be unnecessary. Nevertheless, nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of claim 8. Accordingly, withdrawal of this rejection is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in each reference regarded as corresponding to each element in claim 8 and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of this claim.

7. Claim 10 as originally presented stood rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as said to be modified as applied to claim 1 as a primary reference in view of Azima as a supplementary reference. The primary reference referred to as "Ferren as modified" is said to make obvious all elements of claim 1. The reference referred to as "Ferren as modified" does not disclose the loudspeaker is constructed to transduce acoustical energy substantially at least 7 watts of electrical energy per square inch of radiating surface. The Azima supplementary reference is said to disclose a 25mm transducer driven by 40 watts that is bonded to a ceiling tile as a resonator. If the ceiling tile were two inches by two inches, it is said the

Applicant : Henricksen et al.
 Serial No. : 09/688,525
 Filed : October 16, 2000
 Page : 16 of 26

speaker system would transduce $40\text{W}/(2\text{in} \times 2\text{in}) = 10\text{W}/\text{in}^2$. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to decrease the size of the speaker in order to obtain at least seven watts of electrical energy per square inch of radiating surface.

This ground of rejection is respectfully traversed. The citation of the primary reference modified as applied to claim 1 is not understood. If the Examiner is referring to the rejection of claim 1 on a primary and secondary reference, then Azima would be a tertiary reference. Claim 10 is dependent upon and includes all the limitations of claim 2, and the reasoning set forth below in support of the patentability of claim 2 is submitted to support the patentability of claim 10 so that further discussion of claim 10 is submitted to be unnecessary. Nevertheless, nothing in any of the references suggest the desirability of combining what is there disclosed to meet the terms of claim 10. Nothing in the Azima supplementary reference even discloses the limitations added by claim 10. In the Azima supplementary reference, column 5 only discloses a preferred form of excitation that is a unitary moving coil inertial transducer with a 25mm or 38mm voice coil, 6 ohms impedance, 40 watt power handling, with the coil bonded directly to the panel surface. There is no disclosure of the loudspeaker system being constructed and arranged to transduce to acoustical energy substantially at least 7 watts of electrical energy per square inch of radiating surface. It is thus impossible to combine the references to meet the terms of claim 10.

"Moreover, we observe that even if these references were combined in the manner proposed by the examiner, that which is set forth in appellant's claims . . . would not result." *Ex parte Bogar*, slip op. p.7 (BPA&I Appeal No. 87-2462, October 27, 1989). "Even if we were to agree with the examiner that it would have been obvious to combine the reference teachings in the manner proposed, the resulting package still would not comprise zipper closure material that terminates short of the end of the one edge of the product containing area, as now claimed." *Ex parte Schwarz*, slip op. p.5 (BPA&I Appeal No. 92-2629 October 28, 1992). "Although we find nothing before us indicating why it would be desired to combine the references in the manner urged by the examiner, it is clear to us that such a modification by itself would not result in that which is set forth in the claims." *Ex Parte Kusko*, 215 U.S.P.Q. 972, 974 (BPA&I 1981).

That is reason enough for withdrawing the rejection of claim 10 which appears to be based on a combination of three references.

If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as corresponding to each element in claim 10, and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of claim 10.

8. Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as said to be modified as applied to claim 1, further in view of Pitre as a supplementary reference. As said to be stated above apropos of claim 1, Ferren as modified is said to make obvious all elements of claim 1. Ferren as said to be modified does not disclose a loudspeaker system radiating at least six octaves. The supplementary reference is said to disclose an ideal loudspeaker having a frequency response from about 10Hz to about 25kHz, which is said to encompass at least six octaves, with specific reference to column 2, lines 60-64. The supplementary reference is said to teach that an ideal loudspeaker has a frequency response that overlaps the input response of the ear. Therefore, it is said it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the speaker as disclosed by Ferren as said to be modified with a frequency response of at least six octaves in order to produce a wide frequency response that may come close to or overlap the response of the ear to produce a higher fidelity audio signal.

This ground of rejection is respectfully traversed. The identification of "Ferren as modified" as applied to claim 1 is not understood. If the Examiner is referring to the basis for rejecting claim 1 on a primary and secondary references, then Petri is a tertiary reference. In any event nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of claim 2. Nothing in the references suggest the desirability of combining what is there disclosed to meet the terms of claim 2. It does not appear as if Pitre has been listed in any notice of references cited. It is respectfully requested that the Examiner notice Pitre as a reference of record.

The supplementary reference does not disclose line array as defined in claim 2. the references do not suggest the desirability of what is there disclosed to meet the terms of claim 2. The supplementary reference does not remotely suggest the desirability of incorporating anything there disclosed in the line array recited in claim 2. The primary reference does not suggest the desirability of operating over a frequency range of at least six octaves. In disclosing a preferred embodiment with identical four-inch midrange speakers, column 3, lines 43-44, the primary reference discloses the desirability of operation over limited frequency range, not the at least six octaves of operation recited in claim 2.

The limitations of small acoustic drivers each less than three inches in diameter spaced closely together with less than 2 inches separation are important structural limitations for extending operation of the line array to high enough frequencies to enable operating over at least six octaves with properties set forth in the description.

If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in each reference regarded as corresponding to each element in claim 2, and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of claim 2.

9. Claims 3-5 and 7 as originally presented stood rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as said to be modified as applied to claim 1, and further in view of Selby as a supplementary reference.

Regarding claim 3, as said to be apropos of claim 1, Ferren as modified is said to make obvious all elements of that claim. Ferren as modified is said to not disclose a second loudspeaker array which is constructed and arranged to be attached to the first loudspeaker increasing height while width remains constant. The supplementary reference is said to disclose a line source speaker system where the height of the speaker can be modified using several stacked modules, with specific reference to column 3, lines 57-62. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to connect a second loud speaker array in order to increase the height of the loudspeaker.

Applicant : Henricksen et al.
 Serial No. : 09/688,525
 Filed : October 16, 2000
 Page : 19 of 26

Regarding claim 4, as said to be apropos of claim 3, Ferren as said to be modified is said to make obvious all elements of that claim. The supplementary reference is said to further disclose a loudspeaker with a height of 12 feet and width of 7 inches, with specific reference to column 3, lines 57-66, producing a height to width ratio of $12 \text{ feet} \times 12 \text{ inches} / 7 \text{ inches} = 20.57$ which is said to be greater than 20.

Regarding claim 5, as said to be apropos of claim 3, Ferren as modified is said to make obvious all elements of that claim. The supplementary reference is said to further disclose a method for extending the vertical height by stacking modules; that is, attaching a first loudspeaker array to a second loudspeaker array, with specific reference to column 3, lines 57-62.

Regarding claim 7, as said to be apropos of claim 3, Ferren as said to be modified is said to make obvious all elements of that claim. Russell is said to further disclose a speaker system to be used for home or similar use; that is portable, with specific reference to column 2, lines 53-59.

These grounds of rejection are respectfully traversed. Claims 3-5 and 7 are said to be rejected as being unpatentable over Ferren as modified as applied to claim 1 without identifying Russell, and further in view of Selby, but Russell is applied to claim 7 without reference to Selby. In any event, the references do not suggest the desirability of combining what is there disclosed to meet the terms of claims 3-5 and 7. Claims 3-5 and 7 are dependent upon and include all the limitations of claim 2, and the reasoning set forth above in support of the patentability of claim 2 are submitted to support the patentability of claims 3-5 and 7 so that further discussion of any supplementary references is submitted to be unnecessary. Furthermore, as to claim 3, there is no disclosure in the references of the drivers having a diameter of less than 3 inches, nor a disclosure of the second loudspeaker array constructed and arranged to be attached to the first loudspeaker array in a manner that extends the first substantially straight line so that the height of the loudspeaker is increased and so that the width of the loudspeaker system remains constant. The supplementary reference discloses side-by-side columns. There is no disclosure in the reference of the height of the loudspeaker system to the width being greater than 20. The height-to-width ratio of Selby must include the width of base 16. In column 3, lines 20-

Applicant : Henricksen et al.
Serial No. : 09/688,525
Filed : October 16, 2000
Page : 20 of 26

23, the reference states, "The twin column design of the open line source speaker system, with the extended vertical height of both columns, is less sensitive to changes in listener position." The references do not disclose the attachment device for attaching the first loudspeaker array to the second loudspeaker array called for by claim 5 or disclose that the first loudspeaker array is portable.

Accordingly, withdrawal of the rejection of claims 3-5 and 7 as unpatentable over the references is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as corresponding to each element in these claims and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

10. Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as said to be modified as applied to claim 3 and further in view of Pawlowski as a supplementary reference. As said to be apropos of claim 3, Ferren as modified is said to make obvious all elements of that claim. Ferren as modified is said not to disclose circuitry which provides essentially the same audio signal to all of the acoustical drivers in both of the loudspeaker arrays at all frequencies. The supplementary reference is said to disclose a loudspeaker system where each acoustical driver is provided with the same audio signal with specific reference to Fig. 3. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to use circuitry that provides all drivers with the same audio signal in order to provide the same signal to all drivers of a speaker array for a uniform output.

This ground of rejection is respectfully traversed. Claim 6 is dependent upon and includes all the limitations of claims 2 and 3, and the reasoning set forth above in support of these claims is submitted to support the patentability of claim 6 so that further discussion is submitted to be unnecessary.

11. Claim 12 as originally presented stood rejected under 35 U.S.C. §103(a) as being unpatentable over Selby as a primary reference in view of Ferren as a tertiary reference, and Russell as a cursory reference. The primary reference is said to disclose a loudspeaker module, comprising a portable enclosure having an attachment system for attaching said module to a second module, with specific reference to column 3, lines 59-52 [sic], and at least acoustic drivers having a radiating surface, with specific reference to Fig. 1, the drivers positioned in the enclosure in a straight line regularly spaced, and the loudspeaker array said to be constructed and arranged to radiate sound over essentially the full range of the audible frequency spectrum, with specific reference to column 2, lines 4-6. The primary reference does not disclose the stacking of the speakers being less than one inch apart or with a diameter less than three inches. The secondary reference is said to disclose drivers on a columnar speaker with a size of 1 1/2 inches. The tertiary reference is said to disclose spacing the speakers on a linear speaker array as being 1/2 inch between adjacent speakers, with specific reference to column 5, lines 37-39. The tertiary reference is said to teach speakers to be located as close as possible to enhance directionality, with specific reference to column 5, lines 32-35. Both the primary and secondary references are said to disclose columnar speaker systems for radiating sound over a desired area. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to use a speaker with a diameter less than three inches since it is said to be known in the art that a speaker less than three inches is also capable of radiating sound over a desired area and to use less than one inch between speakers to enhance directionality as said to be taught by the cursory reference.

This ground of rejection is respectfully traversed. There is no disclosure of a portable enclosure having an attachment system for attaching the module to a second module in the same substantially straight line. There is no suggestion in the references to modify what is there disclosed to meet the terms of claim 12.

Accordingly, withdrawal of the rejection of claim 12 as unpatentable over the primary, secondary and tertiary references is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in each reference

regarded as corresponding to an element in claim 12 and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there to meet the terms of claim 12.

12. Claim 13 as originally presented stood rejected under 35 U.S.C. §103(a) as being unpatentable over Russell as a primary reference in view of Ferren as a secondary reference. The primary reference is said to disclose a method for improving a number of electrical watts transducer per unit radiating area of a line array loudspeaker comprising mounting in a straight line a plurality of acoustic drivers, with the specific reference to Fig. 4, each of the acoustic drivers having a diameter of less than three inches and each of the acoustic drivers having a radiating surface having an edge. The primary reference is said to disclose a columnary arrangement of 1 1/2 speakers, with specific reference to column 2, lines 4-6, and the use of multiple speakers said to increase the dynamic range of the speaker with specific reference to column 8, lines 1-5. The primary reference does not disclose placing acoustic drivers so that the edges of the radiating surfaces of adjacent acoustic drivers are separated by no greater than one inch. The secondary reference is said to disclose a linear speaker array where spacing between adjacent speakers is 1/2 inch, with specific reference to column 5, lines 39-42. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to combine the linear speaker system as disclosed by the primary reference with the spacing of speakers taught by the secondary reference in order to increase the watts transduced per unit radiating area.

This ground of rejection is respectfully traversed. Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of claim 13. There is no mention in the references of increasing the watts transduced per unit radiating area or operating over at least six octaves.

Accordingly, withdrawal of the rejection of claim 13 as unpatentable over the primary and secondary reference is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as

Applicant : Henricksen et al.
Serial No. : 09/688,525
Filed : October 16, 2000
Page : 23 of 26

corresponding to each element in claim 13, and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of this claim.

13. Claims 14-18 as originally presented stood rejected under 35 U.S.C. §103(a) as being unpatentable over Ferren as a primary reference in view of Russell as a secondary reference.

Regarding claim 14, the primary reference is said to disclose a loudspeaker system for a live source of sound comprising a line array loudspeaker comprising a line array plurality of acoustic drivers, with specific reference to Fig. 2, each of the acoustic drivers positioned in an enclosure in a straight line less than 1 inch apart, the line array said to be constructed and arranged to be placed in the near vicinity of the live source of sound facing an audience said to be an announcer in the vicinity of loudspeakers used in public address system such as in Fig. 1. The primary reference does not disclose the speakers having a diameter less than three inches. The secondary reference is said to disclose a speaker system with an array of drivers and said to disclose prior art including a columnar speaker assembly including six 1 1/2 inch dome drivers, with specific reference to column 2, lines 4-7. Both references are said to disclose columnar speaker systems for radiating sound over a desired area. Therefore, it is said it would have been obvious to one skilled in the art at the time the invention was made to use a speaker with a diameter less than three inches since it is said to be known in the art that a speaker less than three inches is also capable of radiating sound over a desired area.

Regarding claim 15, as said to be apropos of claim 14, the primary reference as said to be modified is said to make obvious all elements of that claim. The primary reference is said to further disclose a sound delivery system to be used as a public address system in numerous places and situations and/or playing background music or the like which could include vocalist musical performer and presenting entity, with specific reference to column 1, lines 9-12.

Regarding claim 16, as said to be apropos of claim 15, the primary reference as modified is said to make obvious all elements of that claim. The primary reference is said to further

Applicant : Henricksen et al.
 Serial No. : 09/688,525
 Filed : October 16, 2000
 Page : 24 of 26

disclose a sound delivery system to be used as a public address system in numerous places and situations and/or playing background music or the like which could include a plurality of performers, with specific reference to column 1, lines 9-12, loudspeaker system comprising a plurality of line arrays, with specific reference to Figs. 1, 10, 12, 14 and 16, and line arrays having a plurality of acoustic drivers, with specific reference to Fig. 2, a plurality of drivers positioned in an enclosure in a straight line regularly spaced less than one inch apart, with each line array being constructed and arranged to be placed in the vicinity of one of the plurality of performers. The primary reference is said to disclose an announcer in the vicinity of the loudspeaker. The secondary reference is said to further disclose columnar arrangement of speakers having a size of 1 1/2 inches, with specific reference to column 2, lines 4-5.

Regarding claim 17, as said to be apropos of claim 14, the primary reference as modified is said to make obvious all elements of that claim. The primary reference is said to further disclose the live source as an announcer, with specific reference to column 1, lines 53-57.

Regarding claim 18, as said to be apropos of claim 14, the primary reference as modified is said to make obvious all elements of that claim. The primary reference is said to further disclose an announcer who walks back and forth in front of his or her audience at time approaching any one of the arrays, with specific reference to column 3, lines 19-23.

These grounds of rejection are respectfully traversed.

The primary reference owned by The Walt Disney Company explains, "Although the invention was designed for use in situations where audio programs are directed to the public at large, the ultimate use of a linear speaker array is not a feature of the invention." Column 3, lines 6-9. These claims call for the line array being constructed and arranged to be placed in the near vicinity of the live source of sound, facing an audience. The references do not disclose such structure or that the live source of sound is from the group consisting of a vocalist musical performer and presenting entity as called for by claim 15, or that the live source is an orator as called for by claim 17, or that the line array is constructed and arranged to be placed so that the live source of sound is between the line array and the audience as called for by claim 18. Manifestly, the references do not disclose that the musical performer entity comprises a plurality

Applicant : Henricksen et al.
Serial No. : 09/688,525
Filed : October 16, 2000
Page : 25 of 26

of performers with the loudspeaker system comprising a plurality of line arrays each having all the limitations of claim 14 and constructed and arranged to be placed in the near vicinity of one of the plurality of performers and operative over at least six octaves.

Accordingly, withdrawal of the rejection of claims 14-18 as unpatentable over the primary and secondary references is respectfully requested. If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in each reference regarded as corresponding to an element in each of these claims and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the terms of these claims.

New claims 21 and 22 have been added to define features of the invention submitted to be clear of the art.

15. The courtesy of the Examiner in making an additional diligent search is acknowledged with appreciation. The references cited, but not applied, have been examined and are submitted to be incapable of anticipating, suggesting or making obvious the subject matter as a whole of the invention disclosed and claimed in this application.

In view of the foregoing, authorities, remarks, and the inability of the prior art to anticipate, suggest or make obvious, the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. Should the Examiner believe that the application is not in condition for allowance, he is respectfully requested to telephone the undersigned attorney at 617-521-7014 to discuss what additional steps he believes are necessary to place the application in a condition for allowance.

Applicant : Henricksen et al.
Serial No. : 09/688,525
Filed : October 16, 2000
Page : 26 of 26

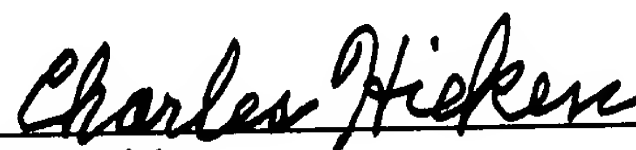
Attorney's Docket No.: 02103-393001

No fees are due with this submission. However the Commissioner is authorized to apply any other charges or credits related to this submission to deposit account 06-1050, order number 02103-393001.

Respectfully submitted,

DEC 3 0 2003

Date: _____



Charles Hieken
Reg. No. 18,411

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

20778237.doc